

Answer Scheme

No	Answer	Mark
1.	7.6.5 = 210 numbers	2 2
2.	(a) at least 3 women and at least one man are included $C(6,3) \times C(10,4) = 20 \times 210 = 4200$ ways $C(6,4) \times C(10,3) = 15 \times 120 = 1800$ ways $C(6,5) \times C(10,2) = 6 \times 45 = 270$ ways $C(6,6) \times C(10,1) = 1 \times 10 = 10$ ways $4200 + 1800 + 270 + 10 = 6280$ ways (b) At most 4 women are included $C(6,0) \times C(10,7) = 1 \times 120 = 120$ ways $C(6,1) \times C(10,6) = 6 \times 210 = 1260$ ways $C(6,2) \times C(10,5) = 15 \times 252 = 3780$ ways $C(6,3) \times C(10,4) = 20 \times 210 = 4200$ ways $C(6,4) \times C(10,3) = 15 \times 120 = 1800$ $1260 + 3780 + 4200 = 11160$ ways	1 1 1 1 1 1 1 1